

Yukon Kuskokwim Delta Service Unit

OVERVIEW

Alaska Native 1998 User Population.

YUKON-KUSKOKWIM SERVICE UNIT	19,771
Aniak Service Area	1,265
Anvik Service Area	616
Bethel Service Area	11,657
Chevak Service Area	2,016
Mountain Village Service Area	4,217

Users are defined as beneficiaries who used a facility that reports through the IHS data system at least once between 10/1/95 and 9/30/98.

Environmental Factors. The Yukon-Kuskokwim Delta (Y-K-D) is located in Southwestern Alaska, approximately 400 air miles from Anchorage. It encompasses 75,289 square miles of coastal wetlands, tundra, and mountains. The service area consists of 50 Eskimo and Indian villages along the Yukon and Kuskokwim River and their tributaries. On the Yukon, the Y-K-D begins at the village of Grayling and follows the River to Kotlik where it empties into the Bering Sea. The Kuskokwim River boundary begins at the community of McGrath and follows the River down the coast to Quinhagak. This large river system includes most Bering Sea coastal villages, as well as the communities on Nunivak and Nelson islands.



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The sub-arctic climate of the Y-K-D hosts short, cool summers and long, cold winters, which are affected by both the continental and transitional climatic zones. The continental zone is characteristic of warm summers and very cold, dry winters and includes the interior villages, depicting the largest land mass within the Y-K-D. The transitional zone encompasses the coastal communities and exhibits generally milder temperatures than the interior with comparable precipitation levels (approximately 20 inches per year). High average wind speeds are present in both zones creating snowdrift barriers for ground transportation and high wind chill factors on cold days.

Utilities. Electricity, water, sewer, and solid waste collection are available in most of Bethel. Those communities that do not have water and sewer facilities have honey buckets. All surrounding villages have electricity, but few have adequate water, sewer, and solid waste facilities. Lack of water and sanitation infrastructure is a major public health and community development problem encountered throughout the Y-K-D.

Communications. The communications system in Bethel and surrounding communities include telephone services that link “bush” Alaska with the larger cities in the State. KYUK Radio/Television services broadcasts from Bethel, with substations in Chevak and Aniak. All Alaska communities, including those in the Y-K D, receive television programming via the Alaska Rural Communications Services (ARCS) by satellite from Bethel. The residents along the Kuskokwim River benefit from radio and television programming from KYUK and ARCS, while residents along the Lower Yukon River receive ARCS and radio services from KNOM and KICY radio in Nome, Alaska. KCUK radio operates out of Chevak, and rebroadcasts KYUK radio signals to the coastal region of the Y-K D.

The weekly newspapers “The Tundra Drums” and “Delta Discovery” are based out of Bethel. For state and Daily news, Anchorage and Fairbanks newspapers are also available.

The Yukon-Kuskokwim Health Corporation plans a consortium between YK health facilities and schools to create a larger and more cost effective communications system. They have been approved for a Universal Services Fund grant to support each village clinic sharing the school district’s a 56K VSAT pipe through wireless LAN. The technology is currently used successfully at the Toksook Bay clinic, but requires encrypted transmission of patient records if the line is shared with another agency.

Transportation. The geography and the climate of the Y-K-D region causes severe transportation limitations. There are no existing road systems linking the 50 villages within the Yukon-Kuskokwim Health Corporation (YKHC) service area with the exception of a gravel road between St. Mary’s, Pitka’s Point and Mt. Village. The Kuskokwim and Yukon River systems and a network of lakes provide linkage between the villages by boat in summer and by snowmachine and truck/car or all terrain vehicle along the Rivers and their tributaries after freeze up. Many villages are more than 100 miles from the hospital. Village patients mostly come in by air taxi, or, in emergencies, by air ambulance (medivac).

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Housing. There is a critical shortage of housing for hospital staff. Bethel is situated two hours travel time by air to the nearest community that can provide health care or housing opportunities. Rotating service unit personnel have no incentive to purchase housing in Bethel, since there is no re-sale market, the housing is poorly constructed, and in many instances fails to meet basic building codes. Water and sewage are handled via holding/storage tanks or in many cases sanitary waste is handled utilizing the “honey bucket” system. Rental units are rare. Prices are extremely high and waiting lists are long. Frequently, there are no available rentals. A proposed 79 unit staff quarters is approved for construction by the Indian Health Service (IHS) and is on the IHS Health Care Facilities Priority List.

Education. In the YKHC service area, K-12 education is provided by the Lower Kuskokwim, Lower Yukon, Kuspuk, Iditarod, Kashanamiut and Yup’iit School Districts. In October 1997, total enrollment for the school districts was 6,188 students. The Lower Kuskokwim School District headquartered in Bethel, Alaska, is the sixth largest school district in Alaska. In higher education, the University of Alaska-Fairbanks operates the Kuskokwim Campus where a limited variety of Associate of Arts and Bachelor Degree programs are available, which are also provided through audio-conference classes all over the state.

Test scores for YKHC region school districts are compared below to statewide 11th Grade California Achievement Tests version 5 scores (CAT5) in 1997.

School District	Student #	TQR	BQR	TQM	BQM	TQL	BQL
Lower Kuskokwim	3,372	4.8	69.0	14.7	40.0	7.4	48.0
Kashunamiut	247	8.3	83.3	16.7	25.0	0.0	25.0
Lower Yukon	1,736	0.0	62.7	2.0	49.0	3.9	43.1
St. Mary’s	130	0.0	85.7	0.0	71.4	0.0	42.9
Yup’iit	401	0.0	100.00	0.0	80.0	0.0	93.3
Alaska Statewide	126,465	29.6	22.7	33.5	18.6	24.1	23.3

TQR = Top Quartile Reading

BQM = Bottom Quartile Math

TQM = Top Quartile Math

BQL = Bottom Quartile Language

TQL = Top Quartile Language

BQR = Bottom Quartile Reading

Source: Report Card to the Public, Alaska Department of Education, 1998.

Natural Resources. The YKHC service area’s population is in transition from a traditional subsistence-based lifestyle to a blended subsistence and cash economy. This fundamental change is occurring rapidly and affects every facet of life in the Y-K-D region including the growth of communities, population patterns, the environment, education, communications, transportation, and employment.

Both the Yup’ik and Athabascan cultures are centered upon subsistence activities. Traditional values continue to stem from the relationship that the people have with the land and traditionally utilized resources. Native spirituality is rooted in the understanding and knowledge of how the people can maintain proper balance within their environment through

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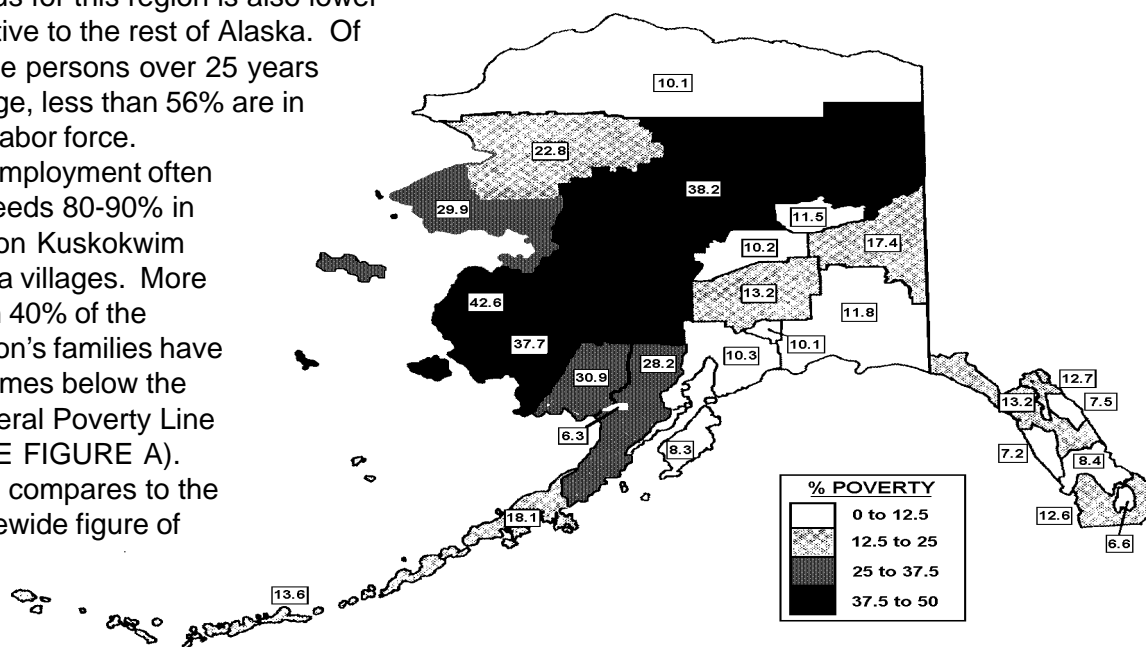
efficient utilization of their resources (i.e., fish, game, birds and plants). Property is largely related to the successful quest for and management of traditional natural resources. Traditional education emphasized the development of a personal awareness of the cycle of nature, having a reverence for subsistence resources and encouraged the widest possible distribution of resources for community benefit. These values bonded the social network of the community, strengthening cultural philosophies that promoted healthy family and kinship systems, and encouraged the sharing of food, working together and celebration of life.

Traditional values are so important that a museum in the early 1990s was constructed in Bethel, called the “Yup'it Piciryarait” (the ways of the Yup'ik peoples) Cultural Center to help preserve the traditions and lifestyles of the local indigenous peoples in the Y-K D region.

Health and social service studies have commonly recognized that the continued high levels of alcoholism, suicide, and domestic violence are related directly to the rapid pace of social change within communities. Even though the American Indian, Eskimo, and Aleut population comprise only 15.58% of the general population in Alaska, the State Division of Alcoholism and Drug Abuse reported that of their 7,998 non-duplicated clients, 46% were Alaska Native. Because of Western contact (50 to 75 years ago for the Y-K D region villages), contemporary values have been thrust upon the villages through western education, religion and government systems which conflict directly with traditional values and practices. Forced changes in lifestyle, economics, eating habits or food sources, family/gender roles and responsibilities have resulted in high stress levels. Stress associated with recent acculturation has contributed significantly to the overall poor health status of Alaska Native peoples.

Employment. The socioeconomic status for this region is also lower relative to the rest of Alaska. Of those persons over 25 years of age, less than 56% are in the labor force. Unemployment often exceeds 80-90% in Yukon Kuskokwim Delta villages. More than 40% of the region's families have incomes below the Federal Poverty Line (SEE FIGURE A). This compares to the statewide figure of

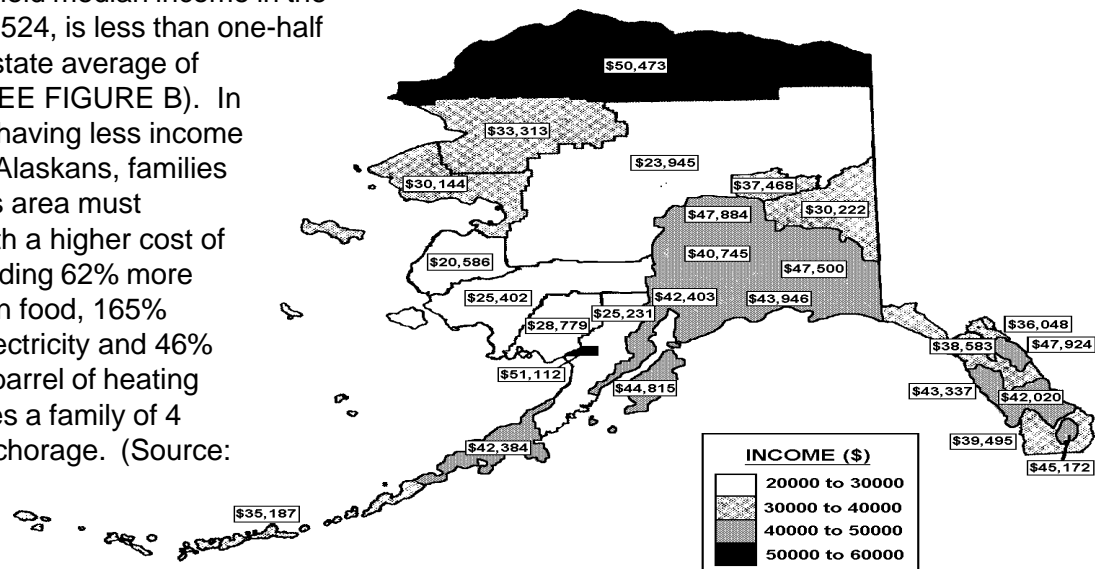
Figure A



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12%, and ranks the highest in Alaska. The household median income in the Y-K D, \$20,524, is less than one-half that of the state average of \$41,408 (SEE FIGURE B). In addition to having less income than other Alaskans, families living in this area must contend with a higher cost of living, spending 62% more per week on food, 165% more on electricity and 46% more on a barrel of heating oil than does a family of 4 living in Anchorage. (Source: The AFN Report of the Status of Alaska Natives, A Call For Action, 1988.)

Figure B



Tribes. Listed below are the Federally recognized Tribes for the Yukon-Kuskokwim area.

Yukon-Kuskokwim Health Corporation Region

Akiachak Native Community IRA - P.O. Box 70, Akiachak, AK 99551
 Akiak Native Community IRA - P.O. Box 52165, Akiak, AK 99552
 Village of Alakanuk - P.O. Box 167, Alakanuk, AK 99554
 Algaaciq Native Village (aka St. Mary's) - P.O. Box 48, St. Mary's, AK 99658
 Yupiit of Andreafski - P.O. Box 368, St. Mary's, AK 99658
 Village of Aniak - P.O. Box 176, Aniak, AK 99557
 Anvik Village - General Delivery, Anvik, AK 99558
 Village of Atmautluak - P.O. Box ATT, Atmautluak, AK 99559
 Village of Bill Moore's Slough - P.O. Box 20037, Kotlik, AK 99620
 Village of Cheforak - P.O. Box 29, Cheforak, AK 99561
 Chevak Native Village - P.O. Box 5514, Chevak, AK 99563
 Native Village of Chuathbaluk - P.O. Box 31, Chuathbaluk, AK 99557
 Chuloonawick Native Village - General Delivery, Chuloonawick, AK 99581
 Native Village of Crooked Creek - P.O. Box 69, Crooked Creek, AK 99575
 Native Village of Eek - P.O. Box 87, Eek, AK 99578
 Emmonak Village - P.O. Box 126, Emmonak, AK 99581
 Native Village of Georgetown - General Delivery, Bethel, AK 99559
 Organized Village of Grayling IRA (aka Holikachuk) - General Delivery, Grayling, AK 99590
 Native Village of Hamilton - P.O. Box 20130, Kotlik, AK 99620
 Holy Cross Village - P.O. Box 203, Holy Cross, AK 99602
 Native Village of Hooper Bay - P.O. Box 2193, Hooper Bay, AK 99604
 Village of Kalskag - General Delivery, Kalskag, AK 99607

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Native Village of Kasigluk - P.O. Box 19, Kasigluk, AK 99609
Native Village of Kipnuk - P.O. Box 57, Kipnuk, AK 99614
Native Village of Kongiganak - P.O. Box 5069, Kongiganak, AK 99559
Village of Kotlik - P.O. Box 20096, Kotlik, AK 99620
Organized Village of Kwethluk IRA - P.O. Box 84, Kwethluk, AK 99621
Native Village of Kwigillingok IRA - P.O. Box 49, Kwigillingok, AK 99622
Native Village of Kwinhagak IRA (aka Quinhagak) - General Delivery, Quinhagak, AK 99655
Lime Village - General Delivery, Lime Village, AK 99627
Village of Lower Kalskag - P.O. Box 27, Kalskag, AK 99626
Native Village of Marshall (aka Fortuna Ledge) - P.O. Box 10, Fortuna Ledge, AK 99585
Native Village of Mekoryuk IRA - P.O. Box 66, Mekoryuk, AK 99630
Native Village of Mountain Village - P.O. Box 32249, Mountain Village, AK 99632
Native Village of Napaimute - P.O. Box 96, Aniak, AK 99557
Native Village of Napakiak IRA - General Delivery, Napakiak, AK 99634
Native Village of Napaskiak - P.O. Box 6109, Napaskiak, AK 99559
Newtok Village - P.O. Box WWT, Newtok, AK 99559
Native Village of Nightmute - General Delivery, Nightmute, AK 99690
Native Village of Nunapitchuk IRA - P.O. Box 130, Nunapitchuk, AK 99641
Village of Ohogamiut - General Delivery, Fortuna Ledge, AK 99585
Orutsararmuit Native Council (aka Bethel) - 835 Ridgecrest Dr. P.O. Box 927, Bethel, AK 99559
Oscarville Traditional Council - P.O. Box 1554, Oscarville, AK 99559
Native Village of Paimiut - General Delivery, Hooper Bay, AK 99604
Pilot Station Traditional Village - P.O. Box 5040, Pilot Station, AK 99650
Native Village of Pitka's Point - P.O. Box 127, St. Mary's, AK 99658
Village of Red Devil - P.O. Box 49, Red Devil, AK 99656
Native Village of Russian Mission - P.O. Box 9, Russian Mission, AK 99657
Native Village of Scammon Bay - P.O. Box 126, Scammon Bay, AK 99662
Shageluk Native Village IRA - General Delivery, Shageluk, AK 99665
Native Village of Sheldon's Point - General Delivery, Nunam Iqua (Sheldon's Point), AK 99666
Village of Sleetmute - P.O. Box 21, Sleetmute, AK 99688
Village of Stony River - P.O. Box SRV, Stony River, AK 99557
Native Village of Toksook Bay - Neslon Island, Toksook Bay, AK 99637
Tuluksak Native Community IRA - P.O. Box 156, Tuluksak, AK 99679
Native Village of Tuntutuliak - P.O. Box 77, Tuntutuliak, AK 99680
Native Village of Tununak IRA - P.O. Box 77, Tununak, AK 99681
Umkumiute Native Village - General Delivery, Nightmute, AK 99690

DESCRIPTION OF HEALTH-CARE DELIVERY SYSTEM

The Yukon Kuskokwim Health Corporation (YKHC) headquarters is located in Bethel, 60 miles from the mouth of the Kuskokwim River. Bethel serves as the commercial center for the Y-K D region and supports daily one hour flights to Anchorage. Aniak, on the Upper Kuskokwim River which has a sub-regional clinic; and St. Mary's, on the Lower Yukon River which has a new sub-regional clinic, also has regularly scheduled commercial flight services to Anchorage. Aniak serves as the upper port for ocean-going vessels on the Kuskokwim River during the summer.

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Health care services for Y-K D residents are provided following a “Four Tier Model” which incorporates primary care services by: 1) Clinics, 2) Sub-Regional Clinics, 3) Yukon-Kuskokwim Delta Regional Hospital, and 4) Alaska Native Medical Center. The Four Tier Model is used to assure a continuum of quality care for patients needing advanced medical services.

Health care in the Y-K D is also provided through a variety of different organizations including YKHC, State of Alaska Public Health Nursing, Bethel Community Services, Infant Learning Program, Yukon-Kuskokwim Correctional Center clinic, and Bethel Family Clinic.

Yukon-Kuskokwim Health Corporation (YKHC) is a private, non-profit 501 (c) (3) health organization that delivers primary care, educational, preventive, and planning services to the people of the Yukon-Kuskokwim Delta. Funding for the Corporation is primarily provided through the Indian Health Service (IHS) via the Alaska Area Native Health Service and the State of Alaska for designated programs.

Organized in 1969 as part of the Office of Economic Opportunity’s effort to develop consumer controlled health organizations, YKHC started with four programs. Until recently, providing more than 30 programs, YKHC operated as a federally-designated contractor under P.L. 93-638, the Indian Self-Determination and Education Assistance Act of 1975. In January 1995, under the Self-Governance Demonstration Project, YKHC began to provide its health delivery services through the Alaska Tribal Health Compact, an all-Alaska Tribal self-governance agreement with the IHS.

The Y-K-D area is divided into 11 representative units for YKHC’s purpose. YKHC serves 58 federally recognized Tribes, acknowledged through continuing Tribal Resolutions for provision of primary health care services on their behalf under the Alaska Tribal Health Compact.

The Yukon-Kuskokwim Health Corporation (YKHC), was organized in 1969. Over the years, the organization has greatly expanded its staff, budget and provision of health services. YKHC now provides primary care, educational, preventive and planning services to over 18,000 persons, most of whom are Yup’ik Eskimos. In 1978, YKHC became a P. L. 93-638 contractor under the Indian Self-Determination and Education Assistance Act. On October 1, 1991, the transfer of the Yukon-Kuskokwim Delta Regional Hospital from the IHS to the YKHC took place. The YKHC receives some funding from the State of Alaska.

Name and Location of Hospitals/Health Centers/Clinics.

Yukon Kuskokwim Delta Regional Hospital, P.O. Box 287, Bethel, Alaska 99559

Aniak Sub-Regional Clinic, P.O. Box 269, Aniak, Alaska 99557

Emmonak Sub-Regional Clinic, General Delivery, Emmonak, Alaska 99581

St. Mary’s Sub-Regional Clinic, General Delivery, St. Mary’s Alaska 99658

Yukon-Kuskokwim Delta Regional Hospital (YKDRH).

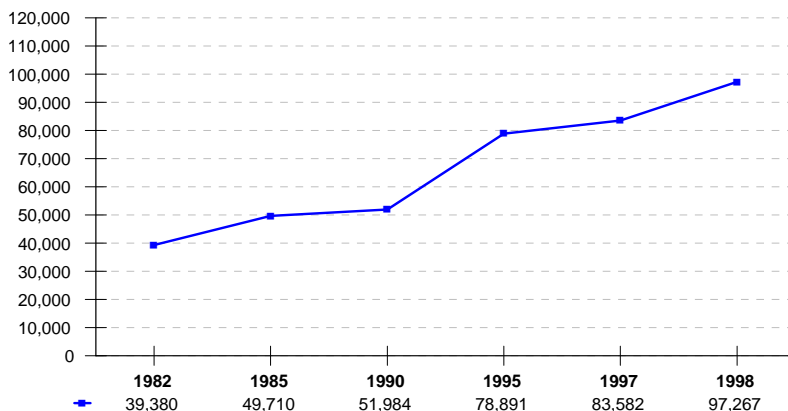
On October 1, 1991, YKHC assumed the management and operation of the hospital through the Indian Health Service P.L. 93-638 contracting process. This regional hospital is a 50-bed

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general acute care medical facility located in Bethel, Alaska. It consists of a single-story steel frame structure encompassing 100,000 square feet of space, and has full accreditation by the Joint Commission on Accreditation of Healthcare Organizations. Hospital services include a 19-bed adult medical-surgical ward, an 18-bed pediatric ward, a 7-bed obstetric ward, 6 swing beds (Adult/OB), and the following outpatient departments: emergency room, dental department, eye clinic, pharmacy, lab, X-ray, and specialty clinics.

YKDRH service is based on a unique service plan called "Group Practice." Three wings of the hospital are dedicated to outpatient care, each serving a pre-set group of villages. All patients are seen according to the villages they are from in either Group Practice I, II, or III. Each patient is assigned a doctor, who will be the patient's physician for as long as the doctor is employed by YKDRH. The patient/doctor assignment system at YKDRH is utilized to ensure that the patient's health condition is being monitored by the same health care provider. Group practice seeks successfully eliminating long outpatient waiting periods. It also strives for reducing patients from being seen by a variety of doctors, which may create undue lack of knowledge of a patient's history.

**Yukon-Kuskokwim Delta Regional Hospital
Outpatient Workload: FY 1982 - FY 1998**



Source: Indian Health Service Inpatient/Outpatient Reporting System in Albuquerque, APC Report 1A, and some facilities are from local databases.

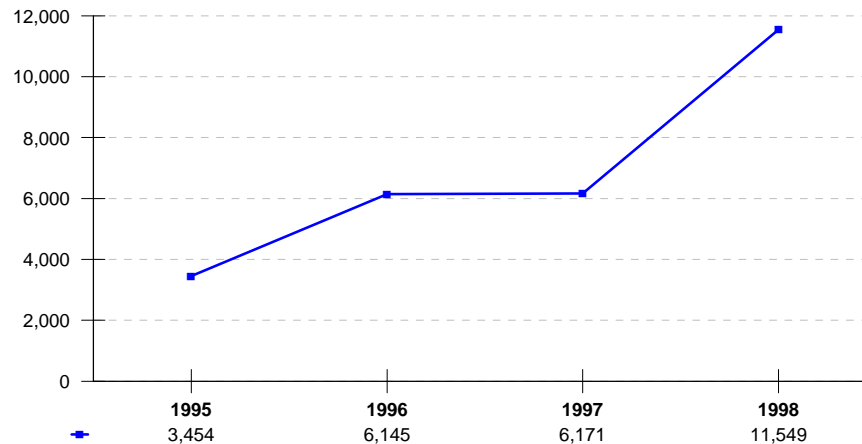
Yukon Kuskokwim Delta Service Unit Leading Causes of Outpatient Visits: FY 1994 - FY 1997

All Age Groups	FY 1994	FY 1995	FY 1996	FY 1997
Upper Respiratory Problems	8,061	7,614	8,580	9,355
Hypertension	5,917	6,037	7,837	9,042
Refractive Error	3,688	6,429	6,113	5,935
Accidents & Injuries	4,988	4,926	5,867	5,874
Otitis Media	5,170	5,363	6,360	5,575
Prenatal Care	7,272	5,097	4,310	4,091
Family Planning	3,581	3,212	3,352	3,651
Heart Disease	2,366	2,714	3,268	3,423
Bone & Joint Disorders	2,614	2,739	3,050	3,316
Tests Only	2,917	4,588	4,703	3,280

Source: Indian Health Service Inpatient/Outpatient Reporting System, APC Report 1C.

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Aniak Health Center Outpatient Workload: FY 1995 - FY 1998



Source: Indian Health Service Inpatient/Outpatient Reporting System in Albuquerque, APC Report 1A, and some facilities are from local databases.

Aniak Subregional Clinic Outpatient Diagnosis: FY 1995 - FY 1997

All Age Groups	FY 1995	FY 1996	FY 1997
Upper Respiratory Problems	467	826	666
Accidents & Injuries	355	674	603
Otitis Media	358	640	507
Hypertension	226	520	483
Tests Only	526	478	334
Immunization	198	318	275
Refractive Error	368	226	269
Bronchitis & Emphysema	96	240	201
Hospital Medical/Surgical Follow-up	153	246	192
Family Planning	124	208	192

Source: Indian Health Service Inpatient/Outpatient Reporting System, APC Report 1C.

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Clinical Services consists of the following programs: *Dental, Dental Disease Prevention, Eye Care, Women, Infant, and Children (WIC), and HIV/AIDS Case Management.*

Sub-Regional Clinics are planned to bring “hospital service” health care closer to the patient populations. A strategically situated sub-regional clinic would be built in a “hub” center surrounded by a cluster of villages. The Clara Morgan Clinic was built in Aniak and serves 16 tribes and has been operational for over two years. Emmonak and St. Mary’s sub-regional clinics opened in the spring of 2001. Plans are underway to build sub-regional clinics in Hooper Bay and Toksook Bay. Sub-Regional clinics have all the services of a hospital (x-ray, dental, optometry, laboratory, urgent care, pharmacy, etc.) except beds and are staffed by mid-level health care providers and community health aides.

Community Services includes the following village operations: *Emergency Medical Services, Health Education and Injury Prevention Program.*

Community Health Aide Services has the following programs: *Physician’s Assistant Scholarship Program, Health Aide Services and Health Aide Training.*

Home Care Services is a village based program that assists elders and chronically ill individuals with activities of daily living, respite care, chore services, personal care services, and home visits.

Elder Activity is a program developed to ensure that appropriate health care services are being provided to the elders in the region. Elders work with the Coordinator to identify services and activities that are desired.

Community Mental Health Services offers *Mental Health, Crisis Respite Center, Delta Supportive Living and the Residential Diagnostic Treatment Center.*

The **Regional Substance Abuse Services** administer *Phillips Ayagnirvik, Chemical Misuse Treatment and Recovery Service, Regional Alcohol and Drug Abuse Prevention, Community Youth Advocate, Community Youth Aftercare Specialist, Bethel Alcohol Safety Action Program, Community Holistic Development and the Fetal Alcohol Syndrome/Fetal Alcohol Effect Prevention Program.*

The **Tribal and Program Support Services** administer *Tribal Unity and Medicine Gathering, Office of Environmental Health and Engineering, Remote Maintenance Worker Program, Research & Planning/Grant Writing Resource Center, Medicaid and Medicare Enrollment and Media Services.*

The **Department of Facilities and Planning** administers *Facilities & Planning and the Village Clinic Coordinator.*

Community Health Aide Programs. The Hospital supports the largest field health care program in Alaska. Presently, 165 Community Health Aides (CHAs) who work in 48 village-

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built clinics make up the YKHC health care delivery system. CHAs work and consult with the Hospital physician staff via telephone when consultation is necessary. Complex health care cases are referred to mid-level practitioners or physicians. Recent program developments have included the introduction of modern telecommunications equipment that enhance the quality and efficiency of CHAs' patient services.

The following villages have community health aides:

Akiachuk	Chuathbaluk	Lower Kalskag	Marshall	Oscarville	Shageluk
Akiak	Crooked Creek	Kasigluk	Mekoryuk	Pilot Station	Nunam Iqua*
Alakanuk	Eek	Kipnuk	Mt. Village	Pitka's Point	Sleetmute
Aniak	Emmonak	Kotlik	Napakiak	Quinhagak	Stony River
Anvik	Grayling	Kongiganak	Napaskiak	Red Devil	Toksook Bay
Atmauthluak	Holy Cross	Kwethluk	Newtok	Russian Mission	Tuluksak
Chefornak	Hooper Bay	Kwigillingok	Nightmute	St. Mary's	Tuntutuliak
Chevak	Kalskag	Lime Village	Nunapitchuk	Scammon Bay	Tununak

*Sheldon's Point

NON-TRIBAL HEALTH AGENCIES AND FACILITIES AND TYPES OF SERVICES PROVIDED TO SERVICE POPULATION

Many federal and state agencies operate out of Bethel: the U.S. Fish & Wildlife Service, Federal Aviation Administration, U.S. Postal Service, National Weather Service, U.S. Department of Agriculture, Alaska Department of Fish and Game, Alaska Department of Corrections, District Attorney's Office, Alaska State Troopers, Alaska National Guard, Alaska Department of Community and Regional Affairs and a variety of other public service offices.

Some of the Native regional, non-profit organizations servicing Y-K D include: the Association of Village Council Presidents, Orutsararmiut Native Council, Kuskokwim Native Association, Association of Village Council Presidents Regional Housing Authority, Kuigpagmiut Inc. Other places of employment consist of private retail shops, banks, seasonal construction, commercial fishing and fish-processing firms.

The Native regional non-profit organizations servicing the Y-K-D include the Association of Village Council Presidents and the YKHC. Other places of employment consist of private retail shops, banks, seasonal construction, commercial fishing and fish-processing firms.

SPECIAL HEALTH INITIATIVES

Sub-regional clinics are being planned in two other hub sites, Hooper Bay and Toksook Bay. The purpose of such facilities are to eliminate long patient travel to Bethel and overcrowding at the hospital.

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A proposed 79 unit staff quarters has been approved for construction by the Indian Health Service, and is on the IHS Health Care Facilities Priority List.

HEALTH STATUS OF ALASKA NATIVES LIVING IN THE YUKON-KUSKOKWIM DELTA SERVICE UNIT

Indicators of the health status of the Y-K D population reflect high infant mortality, premature death in adolescents and young adults due to injuries (both intentional and unintentional), pervasive chemical misuse, and a high prevalence of infectious and respiratory diseases. Although much progress has been made to improve the health status of Y-K D residents through various interventions, the population continues to suffer some of the highest morbidity and mortality rates in the United States.

Mortality. The three-year average crude rate for the Y-K D Service Unit indicates that the death rate is 527.6 per 100,000.

Yukon-Kuskokwim Delta Service Unit Alaska Native Deaths by Age and Three-Year Average Crude Death Rates per 100,000 Population

	1996	1997	1998	3 -Year Rate
Total Deaths	107	100	118	527.6
Age at Death:				
under 5	7	11	6	
5-9	1	1	1	
10-14	2	2	3	
15-24	11	11	15	
25-44	15	15	18	
45-64	20	15	16	
65+	51	43	59	
Age Unknown	0	2	0	
Leading Causes of Death				
	1994-1996 /4		1995-1997 /4	
	AI/AN	U.S.	AI/AN	U.S.
1) Malignant Neoplasms /1	106.3	204.9	113.4	203.4
Lung Cancer	30.4	57.5	37.8	57.3
2) Unintentional Injuries (Accidents) /2	106.3	35.5	88.8	35.8
Water Transport/Drowning	35.4	1.7	29.6	1.6
Motor Vehicles	16.9	16.5	11.5	16.2
3) Heart Disease	84.4	280.7	69	276.4
4) Suicide	54	11.9	54.2	11.6
5) Chronic Obst. Pul. Diseases	20.3	39.2	16.4	40
6) Cerebrovascular	27.0	60.1	26.3	60.3
7) Alcohol Related /3	35.4	7.7	27.9	7.5
8) Pneumonia & Influenza	13.5	31.6	14.8	31.6
9) Congenital Anomalies	8.4	4.5	13.1	4.5
10) Diseases of Early Infancy	6.8	5.1	8.2	4.9

1/ Lung Cancer is included in Malignant Neoplasms.

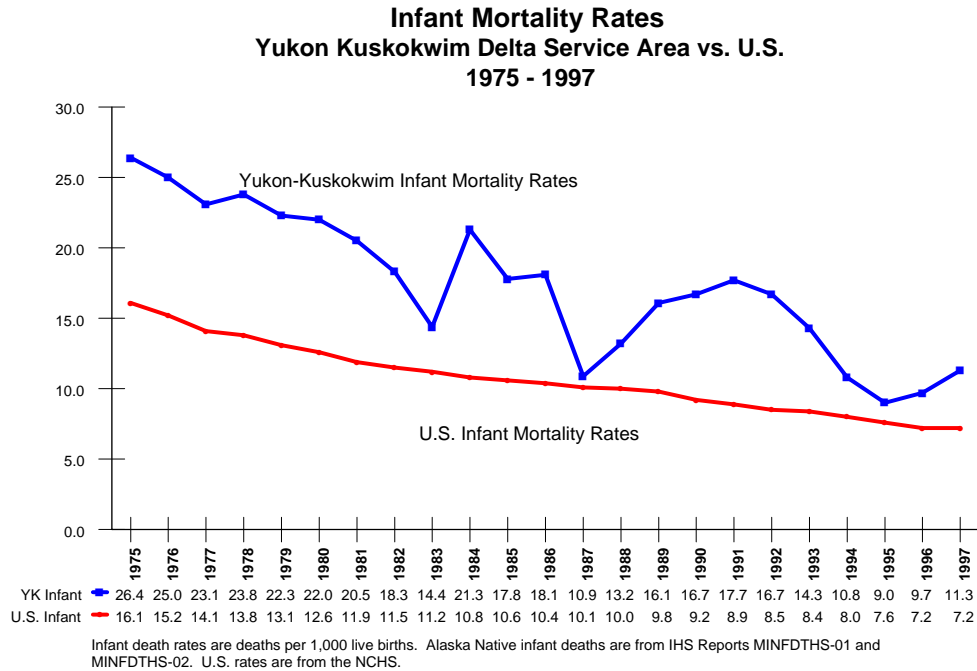
2/ Does not include injuries purposefully inflicted or injuries undetermined whether purposefully or accidentally inflicted. Motor Vehicle and Water Transport/Drowning are also counted in the total Accidents; it does not include alcohol related deaths.

3/ Alcohol Related deaths include alcoholic psychoses, alcohol dependence syndrome, alcohol abuse, alcoholic liver disease and cirrhosis, alcoholic polyneuropathy, alcoholic cardiomyopathy, alcoholic gastritis, excessive blood level of alcohol, and accidental poisoning by alcoholic beverages and ethyl alcohol.

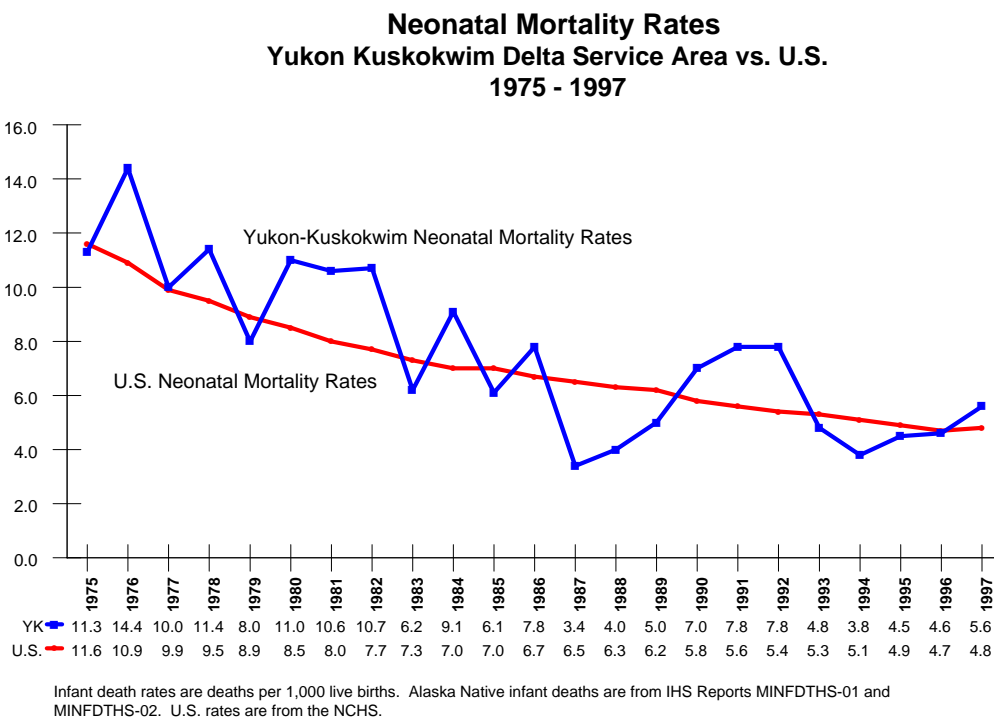
4/ Causes not included when deaths average less than one per year in 1995-97. Single year rates for U.S. Alaska Area Native Health Service, Division of Planning, Evaluation & Health Statistics.

Yukon Kuskokwim Delta Service Unit

Infant Mortality Rates. Infant mortality rates in the Y-K D remain higher than the U.S. Infant death rate is 11.3 compared to 7.2 for the U.S.



Neonatal Mortality Rates. The 1997 neonatal rate for the Y-K D is 5.6 and the U.S. rate is 4.8.

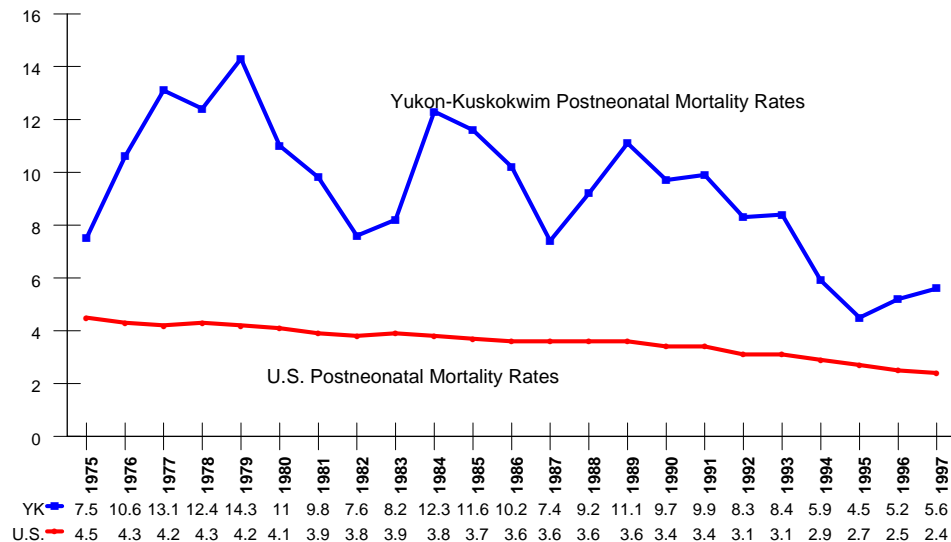


Yukon Kuskokwim Delta Service Unit

Postneonatal Mortality Rates.

The 1997 postneonatal rate for the Y-K D is 5.6 compared to the U.S. of 2.4.

Postneonatal Mortality Rates
Yukon Kuskokwim Delta Service Area vs. U.S.
1975 - 1997

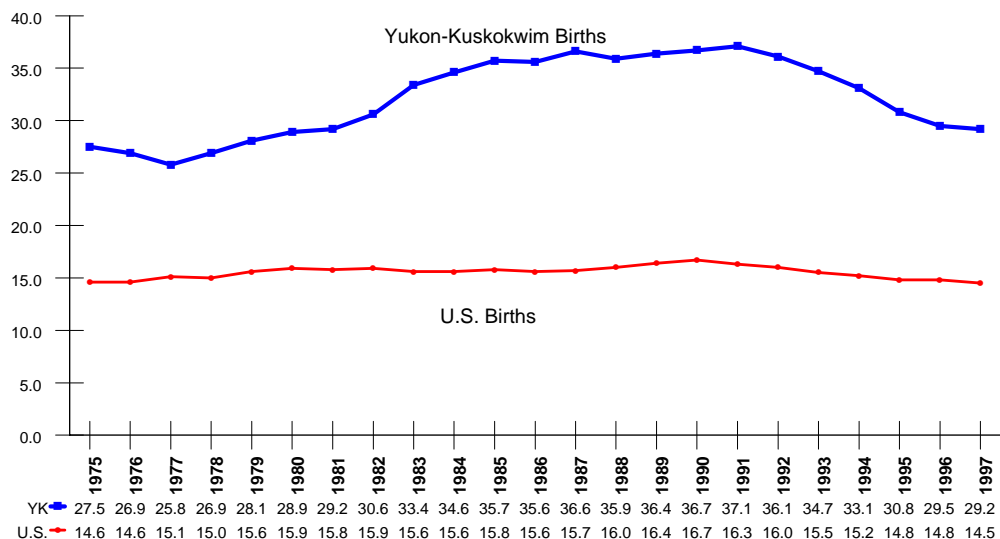


Infant death rates are deaths per 1,000 live births. Alaska Native infant deaths are from IHS Reports MINFDTHS-01 and MINFDTHS-02. U.S. rates are from the NCHS.

Birth Rates.

The 1997 infant birth rate for the Yukon-Kuskokwim Delta Service Unit is at 29.2 per 1,000 total Native population. The U.S. rate for the same period is 14.5.

Birth Rates
Yukon Kuskokwim Delta Service Area vs. U.S.
1975 - 1997



Birth rates are rates per 1,000 total population. Alaska Native births are from IHS Natality Report NSU-01. The three year average is the end year of the three year period. United States birth rates are from the National Center for Health Statistics (NCHS) and are single year rates.

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Suicide. Over the three year period, 1996-1998, the crude suicide death rate for the Y-K-D was 66.2 per 100,000 compared to a U.S. rate of 11.3. Crude suicide rates for all Alaska Natives were 42.0 for the same period.

Alcohol Related. The crude death rate for the Y-K-D was 21 per 100,000 between 1996-1998 compared to a U.S. rate of 7.4. The crude death rate for all Alaska Natives was 39.7 for the same period. Alcohol-related deaths include alcoholic psychosis, alcohol dependence syndrome, alcohol abuse, alcoholic liver disease and cirrhosis, alcoholic polyneuropathy, alcoholic cardiomyopathy, alcoholic gastritis, excessive blood level of alcohol, and accidental poisoning by alcoholic beverages and ethyl alcohol. It does not include alcohol related injuries. Alcohol morbidity is reflected most typically in injury prevalence.

Although overall numbers of persons seeking medical treatment for injuries at the Y-K-D Regional Hospital in Bethel has been declining in recent years, the proportion of persons seeking medical treatment for alcohol-related injuries is increasing. Physicians at the hospital have observed (information obtained from The Calista Region: *"A Gentle People, A Harsh Life,"* February 1989) that:

- ♦ Eighty to ninety percent of all injury cases are alcohol-related;
- ♦ Two-thirds of all major frostbite cases are alcohol-related;
- ♦ Many children's injuries are caused by alcohol-related parental unawareness or neglect;
- ♦ Fetal alcohol syndrome is seen on a regular basis in babies born to mothers who are village residents; and
- ♦ Alcohol used by pregnant women affects the high infant mortality rate.

Alcohol use is also a factor in the high rates of domestic violence, sexual assaults, and child abuse. These have been widely reported in the Anchorage Daily News series, "A People in Peril" and The AFN Report on the Status of Alaska Natives: *A Call for Action*, 1998.

The statistics gathered by the Division of Family and Youth Services and the Tundra Women's Coalition indicate high numbers of intakes and crisis intervention-most of them alcohol-related. In Bethel, the police department estimates that 90% of the arrests are also alcohol-related.

Unintentional Injuries (accidents). The crude death rate for the Y-K-D for the period between 1996-1998 was 79.1 per 100,000 compared to a U.S. rate of 36.2. The unintentional injury crude death rate for all Alaska Natives for the same period was 91.5, slightly higher than the Y-K-D rate. This category includes such incidents as railway, motor vehicle traffic and non-traffic, water, air, and space transport, accidental poisoning by drugs and gases, surgical and medical procedures, accidental falls, accidents caused by fire and flames, and natural and environmental factors, and accidents caused by submersion, suffocation, and foreign bodies.

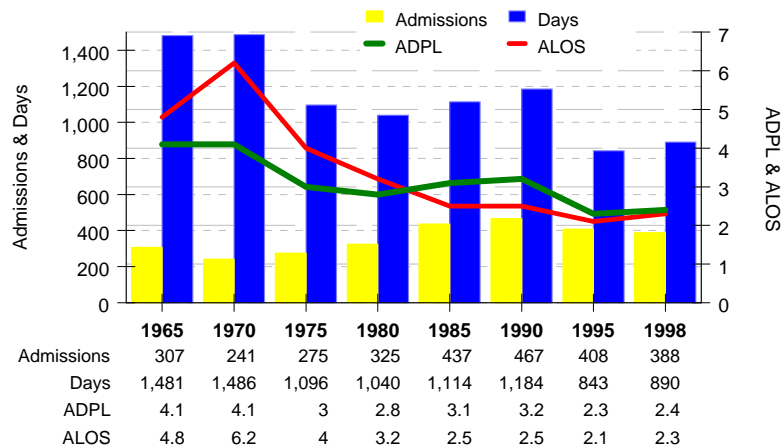
The YKHC workload summary for fiscal year 1997 indicates that Y-K-D clinics had 105,818 individual patient encounters, an increase of 5.3% over 1996 figure of 100,207.

Yukon Kuskokwim Delta Service Unit

INPATIENT WORKLOAD

The newborn inpatient workload for the Yukon-Kuskokwim Delta Regional Hospital is displayed in the graph.

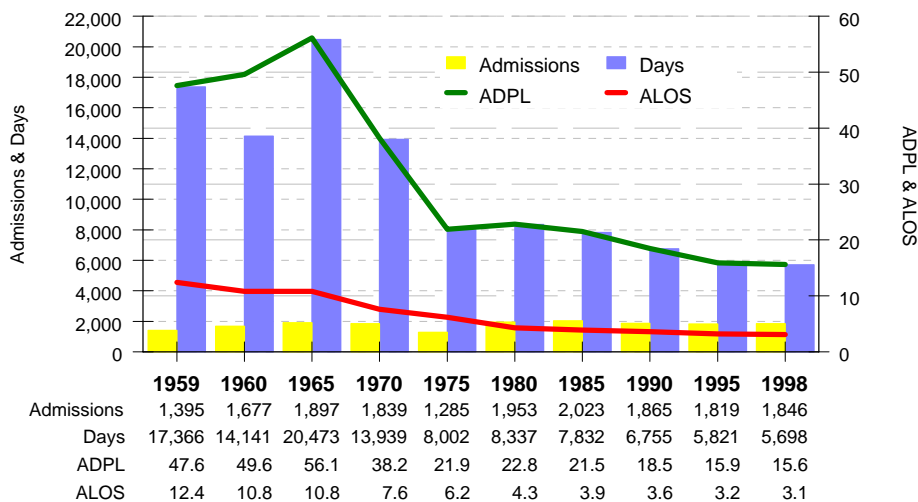
**Yukon-Kuskokwim Delta Regional Hospital
Newborn Inpatient Workload
FY 1965 - FY 1998**



ADPL = Average Daily Patient Load; ALOS = Average Length of Stay
SOURCE: HSA=202 Monthly Report of Inpatient Services

The inpatient workload excluding newborns for the Yukon-Kuskokwim Delta Regional Hospital is displayed in the following graph.

**Yukon-Kuskokwim Delta Regional Hospital
Inpatient Workload Excluding Newborns
FY 1959 - FY 1998**



ADPL = Average Daily Patient Load; ALOS = Average Length of Stay
SOURCE: HSA=202 Monthly Report of Inpatient Services

Yukon Kuskokwim Delta Service Unit

DISCHARGE WORKLOAD

Yukon Kuskokwim Delta Service Unit Leading Causes of Discharges: FY 1994 - FY 1997

	FY 1994	FY 1995	FY 1996	FY 1997
Deliveries (Childbirth)	427	410	419	446
Pneumonia	204	219	200	217
Bronchitis, Emphysema	60	165	128	133
Complications of Pregnancy	135	106	90	110
Accidents & Injuries	157	172	125	108
Infected Skin & Abrasions	76	49	61	60
Urinary Tract Diseases	60	61	44	57
Undiagnosed Symptoms	85	54	46	55
Heart Disease	80	52	64	53
Respiratory Allergies	56	61	41	44

Source: Indian Health Service Inpatient/Outpatient Reporting System, Direct Inpatient Report 2C.